

Template for additional funding ask for Local Growth Fund (LGF) projects

1. Project title

Kent and Medway Engineering, Design, Growth and Enterprise (EDGE) Hub

2. Federated Board

Kent and Medway Economic Partnership

3. Project description

The EDGE Hub is an exciting and unique development within the Kent and Medway region and Engineering and Technology higher education. The Hub is a catalyst for developing an enhanced local and regional strategic approach to inspiring and enabling an expansive sustainable education pipeline, supporting new learning and career pathways. It brings together young people, students, educators and businesses to support these goals, ultimately increasing and diversifying the regional workforce and growing inward investment and the regional economy. At the heart of the project is a new £64.5 million state-of-the-art STEM facility, which will house new specialist health, science and medicine facilities, alongside the EDGE Hub (due to open January 2021) and its £2 million of specialist Engineering and IT equipment. The project has been primarily funded by Canterbury Christ Church University, with additional support from SELEP, the Office for Students, and Charitable Trusts. The building will also house new Kent and Medway Medical School facilities, jointly developed by Canterbury Christ Church University and University of Kent, which have also received funding from SELEP.

4. What was the value of the Benefit Cost Ratio included in the original Business Case approved by SELEP?

2.28:1

5. Summary of project benefits

The Hub will be worth an estimated £7.6m to £11.4m per year to the Kent and Medway economy once it is fully operational, with 1250 new learners with higher level Engineering and Technology skills coming into the labour market by 2024, plus a range of research and innovation benefits. The Hub will play a crucial role in filling regional skills gaps (through producing new industry-ready graduates and upskilling the existing workforce) and providing a physical space for young people, educators and diverse businesses to come together to collaborate and address current and future challenges.

Outputs to be delivered by the EDGE Hub are:

- 3588 m2 of dedicated floorspace by 2021
- Additional 56 jobs created by 2024
- £1.8m additional income from employer research & consultancy by 2024



- 420 employer student research projects completed by 2024
- Additional £45,000 Innovation Service IP-Related Income by 2024
- 275 additional degree apprenticeship enrolments (included in additional UG & PG enrolments) by 2024
- 12,900 additional school students visits by 2024
- 375 additional short course & CPD learners by 2024
- 1250 additional UG & PG enrolments (inc. FY & apprenticeships) by 2024

6. Existing LGF allocation

£6.120m

7. LGF spent to date

£6.120m

8. Additional LGF sought

£1.224m. Board to consider award of £901,128 LGF initially, with further decision on the remaining £322,872 to be taken if further LGF funding becomes available.

9. Why is additional LGF investment required?

Throughout the COVID-19 international health crisis, which has already had and is predicted to continue to have wide-spread implications for the higher education sector (see for example 'Impact of the COVID-19 pandemic on university finances', London School of Economics, April 2020), the University's commitment to safeguarding the future both of the institution and of the region through the EDGE Hub has remained a priority. However, this has been challenged by additional costs accrued as a result of COVID-19 and changes to health and safety legislation, which have multiplied the difficulties encountered during this period. On top of this, the COVID-19 pandemic has mandated a new approach for the delivery of education and business support. Capabilities such as secure online remote access to specialist equipment, cloud-based design and simulation tools and immersive virtual engineering are now essential requirement. Additional funding is requested to mitigate 4 issues which have impacted and in some cases continue to impact the project:-

1. Impact of COVID-19 on construction – (£20,250 including VAT)
2. Changes to Health and Safety Regulations – (£28,500 including VAT)
3. Design changes, including planning control – (£589,696 including VAT)
4. Changes to delivery models and technology adoption as a result of COVID-19 – (£585,554 including VAT)

1. Impact of COVID-19 on construction – (£16,875 excluding VAT)

At the beginning of March the construction of the Building was on schedule with hand over by the contractors due on the 3rd June 2020 and fit-out completion expected by the end of August 2020. The COVID-19 pandemic resulted in the construction site being shut down at the end of March and due to revised working practices (associated with COVID-19) the building was not



handed over to the University until the 14th September 2020, whereupon fit-out commenced on 15th September 2020. Revised working conditions have impacted on the number of contractors that can occupy the building during fit-out. In addition the University has had to deliver its teaching activities in existing accommodation and can not transfer them into the new building until the end of Term 1. This has meant that the completion of the building has been delayed by 5 months. As a consequence the University has incurred additional project management costs of £50,625 of which £16,875 (excluding VAT) are related to the EDGE Hub project.

2. Changes to Health and Safety Regulations – (£23,750 excluding VAT)

The original project was approved in 2018 and at that time the architects designed the building to meet the necessary Health and Safety standards associated with ventilation. Since that time new standards have been introduced which require reduced levels of exposure to potentially hazardous emissions. In particular the exposure levels associated with welding have been significantly reduced, directly impacting on the delivery of the EDGE Hub project. As a consequence the ventilation systems associated with these areas have had to be designed, enhanced and checked to meet the new safety standards (additional EDGE Hub cost of £23,750 (excluding VAT)).

3. Design changes including planning control – (£491,413 excluding VAT)

As the design and construction of the building have progressed there have been a number of required/approved changes identified as a consequence of planning control (e.g roof top screening, raised brick plinth) and actual costs in excess of the original estimates (e.g. Lab furniture, fume cupboards) which significantly increased the cost of the project by more than the contingency allocated to the project. The University has tried to absorb these costs as much as possible, but given the additional delivery costs and challenges associated with COVID-19, an additional £491,400 excluding VAT (£589,696 including VAT) is requested.

It should be noted that the new STEM building provides accommodation for the EDGE Hub (33.3%), for the new Medical School (KMMS - 33.3%) and for relocating departments (33.3%). As a consequence costs associated with the building have been calculated in their entirety, and then distributed in these proportions to calculate appropriate additional costs and safeguard against double-counting. Where additional costs can be directly attributed to one activity all the costs have been allocated to that area.

4. Changes to delivery models and technology adoption as a result of COVID-19 (£585,554 including VAT)

The University has had to alter the delivery of its EDGE Hub curriculum significantly to support provision during lockdown and social distancing. This has led to an increase in activities provided online and delivery of more practical/ lab sessions due to smaller group sizes, which have created additional costs for the University relating to resources, materials and staffing. The University has put robust measures in place to ensure that these activities can continue to be delivered, and to manage the associated increase in costs. However, this has led to some budget constraints in the purchase of equipment and technologies.

Simultaneously, the impact of COVID-19 on businesses, has been to increase the need for



advanced and integrated technologies, in order to maintain supply chains, improve efficiency and support remote and socially distanced working. The EDGE Hub's long-term goals of filling the regional skills gap, particularly with reference to areas such as industry 4.0, industry 5.0, advanced manufacturing, cyber-security, sustainability and 5G technologies, are more important than ever in the current climate. Results of the South East LEP Business Recovery Survey published in July 2020, show that a high proportion of businesses are turning to digital and technology-enhanced solutions to support their recovery from COVID-19, developing new ways of working and increasing demand of the regional digital infrastructure (<https://www.southeastlep.com/businesses-diversifying-as-digital-emerges-as-frontrunner-for-post-covid-economic-recovery/>).

Additional funding is required to allow the University to invest in and harness advanced digital technologies to provide location-independent services in the South East. The EDGE Hub requires additional capital expenditure to develop immersive virtual engineering capabilities to support and enhance service offerings and delivery of education, apprenticeship training, research and business support during COVID-19 and post-COVID-19. Funding will be spent on: additional purchasing of technologies to provide remote access to students and businesses during COVID (remote integration with existing equipment); creating an infrastructure to support extended and ongoing location-independent access (servers, firewalls, routers); and purchasing unbudgeted equipment that has been newly identified in response to the growth areas and skills gaps emerging due to COVID-19 (supporting data visualisation, digital twins, cyber security, rapid prototyping, etc.).

Additional expenditure will support the purchase of equipment and software tools to enable:

- a. remote utilisation of a selection of functionalities in our new chemical engineering, chemistry and biothermal technology; biomedical engineering and biomedical science; and sustainable energy technology laboratories. This will enable the utilisation of the new physical facility during social distancing and 'The New Normal' to provide and support the education and training of the current and next generation of engineering talent.
- b. enhancing the EDGE Hub offer to South East enterprises through improved accessibility and location independent interface to new and emerging technologies, digital practices, integration and migration, EDGE Hub expertise and services (research, innovation/IP and consultancy) to support regional employer growth and future proofing of regional business. This activity sits alongside the existing staff expertise, curriculum design and long-term aspirations of the EDGE Hub, and will both aid the project in delivering its agreed outputs during the current climate, and to support the regional economic recovery and long-term sustainability of regional businesses.
- c. enhancing the EDGE Hub infrastructure to better explore and act upon opportunities to expand the existing offer – one that can not only support regional recovery, but also create an integrated system (across education, businesses, councils and professional bodies; skills development, workforce growth, research and innovation, and physical and virtual access to specialist facilities) to drive growth and inward investment within the region into the post-COVID-19 era.

In summary, funding investment of £585,554 (including VAT) is requested in order to adapt existing EDGE Hub provision to support the 'New Normal' (as a result of COVID-19), providing sustained improvements and regional growth in Science, Technology, Engineering, Arts and



Medicine. This will enable the development of capabilities in a number of strategically important areas such as:

- Digital twins industry 4.0/5.0 solutions
- Digital policing and crime investigation
- Democratization of arts through virtual galleries
- Telemedicine, remote diagnostics and prognosis
- Robotic life science processes and experiments
- Remote access to rapid prototyping production and analysis facilities

The current stage of the project makes this the perfect time to integrate these new technologies within the new STEM building, as these can be adopted into existing plans for fit out, during 2021. The recent extension of EE 5G networks within the region also supports both the need, improved accessibility and opportunity to provide location-independent access to EDGE Hub resources.

The requested additional funding will not only support the EDGE Hub in delivering its services, adhering to social distancing restrictions and mitigating the impact of lock downs, but also enable the University to provide enhanced support to regional businesses, particularly SMEs. This enhanced support will potentially help our regional businesses extend their reach nationally and internationally.

In our assessment, the flexibility and increased capacity offered by the proposed investment will provide access to new markets and opportunities, support regional growth and provide a strong foundation for the region to operate within the 'New Normal', which is emerging from both COVID-19 and Brexit. Ultimately this will be an important and timely milestone in establishing Kent and Medway region among the recognised leaders in knowledge-based economy.

10. Can the project proceed without the additional LGF allocation?

The KM EDGE Hub is progressing as a project and it has met its target of recruitment in terms of new students and new staff. The project will proceed without additional LGF funding, but without such funding the costs outlined above can only be met by:-

- a) reducing the capital investment in engineering equipment
- b) slowing the implementation of outreach centres located alongside industry

It is estimated that this lack of investment will result in reduced worth to the regional economy by £1.5-£2.0 million a year due to reduced use and engagement by regional companies over the next 5 years. The support the project can provide to the regional economy to overcome the issues associated with COVID-19 and Brexit will be reduced if it has to absorb these additional costs and is not able to increase investment in technologies to support remote delivery.

11. What are the main project risks impacting the ability of the project to proceed?

COVID-19 remains an area of ongoing uncertainty with our supply chain for the project since it could delay the fit out of the building, e.g. fit out specialist teams having to self-isolate. The risks associated with further delay are being minimised by maintaining strict COVID-19 applied working conditions on the construction site and those being managed by our supply chain within



their organisations. The University are managing this risk by having close dialogue with all our supply chain partners, staggering work patterns, strict social distancing, hands, face, space.

Additionally, the increased demand for integrating online and immersive virtual services, as well as the rapid rate of change and adoption of new technologies within engineering and technology, put the project and the region at risk of not being able to meet the needs set within the emerging 'New Normal', without additional investment.

12. Have the project benefits changed since the original Business Case was approved by the Accountability Board?

If yes, please state the nature of these changes and the likely impact on the value for money case.

No

13. How can the project support the economic recovery?

The project as it stands, is expected to support the economic recovery through long-term ambitions and outputs relating to STEM skills development and support for SMEs. The project seeks to establish a sustainable pipeline of STEM graduates, which will be retained in the region, increasing inward spending, fulfilling regional skills needs and encouraging inward investment.

The EDGE Hub is uniquely situated to meet the growing skills gap and emerging appetite for incorporating new technological solutions within existing businesses, through its long-term strategy for regional STEM skills growth and supporting regional business, particularly SMEs. The EDGE Hub offer will assist in upskilling the existing and future South East work force to help mitigate the anticipated job losses as result of economic downturn and adoption of new technologies. The Future of the Workforce 2020 (WEF, October 2020) report identifies that a potential 44% of the workforce could be moved to permanently to remote or hybrid remote working in the years to come.

The requested funding will support the purchasing of additional technologies to support remote access and enable the University to continue to offer its planned curriculum and CPD offer during social distancing, and provide access and training on location-independent technologies to regional businesses. This in turn will support both the University and regional businesses in extending their reach and operations through enhanced remote services and increased flexibility.

14. If additional funding is awarded to the project, are there any remaining barriers to project delivery (for example: outstanding planning approvals, other Governance requirements, other funding sources awaiting confirmation)?

No



SOUTH EAST
LOCAL ENTERPRISE
PARTNERSHIP

Original funding breakdown (as per the original Business Case) (£m)

Funding source	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024 onwards	Total
<i>SELEP</i>	0	0	1.120	2.500	2.500	0	0	0	0	0	6.120
<i>Office for Students (formally HEFCE)</i>	0	0	0	3.000	2.500	1.000	0	0	0	0	6.500
<i>CCCU</i>	0	0	1.610	0.970	0.200	0.200	0.300	0	0	0	3.280
<i>Equipment in kind</i>	0	0	0	0.100	0.200	0.200	0.200	0	0	0	0.700
<i>Borrowing</i>	0	0	0	2.000	0.780	1.000	0.500	0	0	0	4.280
Total	0	0	2.730	8.570	6.180	2.400	1.000				20.880

Revised funding breakdown (£m)

Funding source	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024 onwards	Total
<i>SELEP</i>	0	0	1.120	2.500	2.500	1.224	0	0	0	0	7.344
<i>Office for Students (formally HEFCE)</i>	0	0	0	3.000	2.500	1.000	0	0	0	0	6.500
<i>CCCU</i>	0	0	1.610	0.970	0.200	0.200	0.300	0	0	0	3.280
<i>Equipment in kind</i>	0	0	0	0.100	0.200	0.200	0.200	0	0	0	0.700
<i>Borrowing</i>	0	0	0	2.000	0.780	1.000	0.500	0	0	0	4.280
Total	0	0	2.730	8.570	6.180	3.624	1.000	0	0	0	22.104



Sign off of additional funding ask – required from lead County/Unitary Authority

Dear Colleague,

In submitting this project application for additional LGF, I confirm on behalf of *[Insert name of County or Unitary Authority]* that:

- The information presented in this application is accurate.
- The application states all substantial project risks known at the time of submission.
- The delivery body has considered the public sector equality duty and has had regard to the requirements under s.149 of the Equality Act 2010 throughout their decision making process. This should include the development of an Equality Impact Assessment which will remain as a live document through the projects development and delivery stages.
- The delivery body has access to the skills, expertise and resource to support the delivery of the project.
- Adequate revenue budget has been or will be allocated to support the post scheme completion monitoring and benefit realisation reporting.
- The project will be delivered under the conditions in the signed LGF Service Level Agreement with the SELEP Accountable Body and SELEP Ltd.

I note that the information presented in this application will be presented in the public domain as part of the Strategic Board's prioritisation of projects. Any information presented in this application which is considered commercially sensitive and confidential, has been highlighted as such within this application.

Yours Faithfully,

S151 Officer

Name

Signature

Date

Senior Responsible Officer

Name

Signature

Date